

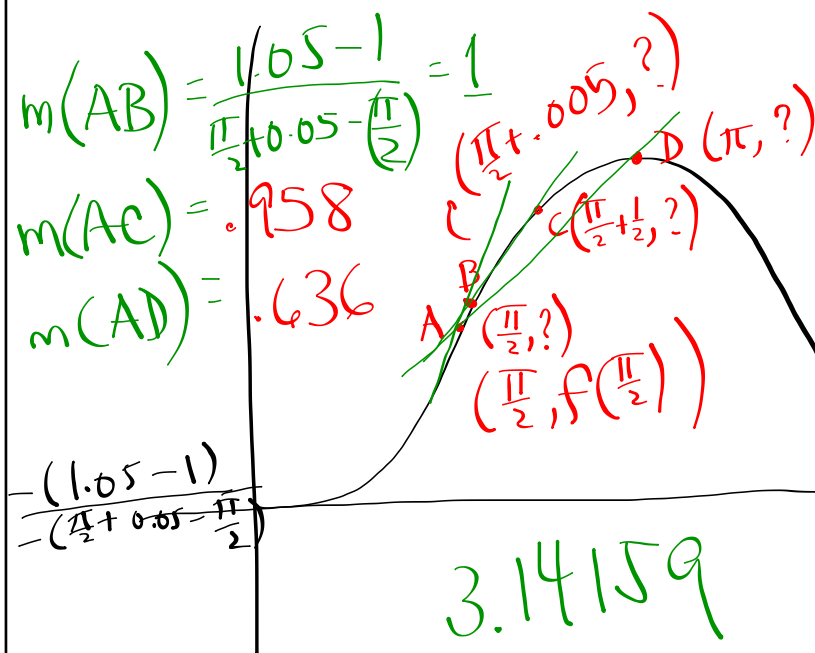
2.1/33f

$$f(x) = 1 - \cos x$$

$$m(AB) = \frac{1.05 - 1}{\frac{\pi}{2} + 0.05 - \frac{\pi}{2}} = 1$$

$$m(AC) = .958$$

$$m(AD) = .636$$



	$f(x)$
A $\frac{\pi}{2}$	1
B $\frac{\pi}{2} + 0.05$	1.05
C $\frac{\pi}{2} + \frac{1}{2}$	1.45
D π	2

$$\pi = 3.14159 \text{ round or } 3.142$$

$$\pi = 3.14178225 \text{ truncate } 3.141$$

$$x - y = -(y - x)$$

A limit is a y-value that
a function approaches but doesn't
quite reach.

But - didn't we reach it here?

Shane: we can get "infinitely close"
but won't reach. . . . "infinitesimally"

A limit is the "culmination"
of an infinite sequence
of y-values.

29/ tangent lines with slope = 0

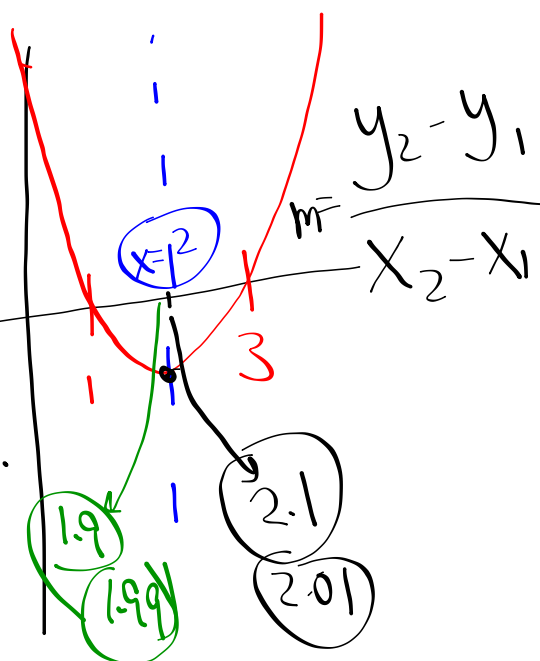
a) graph $y = x^2 - 4x + 3 = (x-3)(x-1)$

b) identify the point

$(a, f(a))$

where $f(x)$ has a slope 0 tangent line.

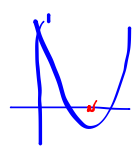
c) blah blah blah



3 prime

5 prime

7 prime



$$\lim_{x \rightarrow a} f(x) = L$$

"the limit as
x approaches
x=a of f(x) is L"

$$\lim_{x \rightarrow a^+} f(x) = L$$

..... of f(x)
FROM THE
RIGHT

$$\lim_{x \rightarrow a^-} f(x) = L$$

... of f(x)
FROM THE
LEFT

